Amendments to the Claims:

(Currently amended) A computer-implemented method for distributing parts to customer locations, the method comprising:

using a processor to prioritize requests for parts from inventory;

using the processor to prioritize customer locations that have need for the parts to create priorities for the customer locations; and

using the processor to form a shipment plan by iteratively assigning a defined minimum size allotment of the parts to a customer location having a current priority and then reprioritizing the priorities of all customer locations and assigning a defined minimum size allotment of the parts to a customer location having a new current priority, until one of all of the parts from inventory have been assigned and no customer location reports a need[[s]] of more of the parts assigned, wherein each current priority is determined from all customer locations for each iteration.

- (Original) The method of claim 1, further comprising defining the minimum size allotment.
- 3. (Previously presented) The method of claim 2, wherein each customer location having a need for the parts from inventory has a percentage need for said parts, and wherein the using the processor to form a shipment plan includes assigning a minimum size allotment to a priority location in each iteration and thereafter re-assigning the priorities such that each customer location having a need is driven to a same percentage need.
- (Original) The method of claim 3, further comprising performing a pallet size pass on the shipment plan.
- (Original) The method of claim 4, wherein the pallet size pass is based on a threshold quantity at which multiples of shippers are cut in full pallets.

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- (Original) The method of claim 5, wherein the pallet size pass is based on a
 pallet quantity that is a quantity of parts that constitutes a full pallet.
- (Currently amended) The method of claim 6, wherein each shipper that passes
 through the pallet size pass has a number of parts that is greater than the threshold
 quantity and equal to or less than the pallet quantity.
- (Original) The method of claim 4, further comprising performing a volume based filter pass on the shipment plan.
- (Original) The method of claim 8, wherein the volume based filter pass is based
 on a minimum shipment quantity defining a smallest amount of parts for a specific
 location or part type.
- 10. (Original) The method of claim 8, wherein the volume based filter pass is based on a percentage impact threshold that is a function of a recommended shipper and a target inventory for a specific location or part type.
- 11. (Original) The method of claim 8, wherein the parts are shipped from a single source.
- 12. (Previously presented) The method of claim 8, wherein the parts are shipped from multiple sources, and further comprising determining a splitting of the shipping of the parts among the multiple sources to fulfill the requests for parts from the customer locations.
- (Original) The method of claim 12, wherein the determining includes forming a balanced supply/demand.

- 14. (Currently amended) The method of claim 13, wherein the determining further comprises using geographic—40eal sales rules in which specified geographic—and local sales shipments are prioritized over optimization of shipments.
- 15. (Previously presented) The method of claim 14, wherein the determining further comprises using a business rule filter in which specified business rules are prioritized over optimization of shipments.
- 16. (Previously presented) The method of claim 15, further comprising creating a set of supply demand scenarios with combinations of providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a part of said shipment plan.
- 17. (Currently amended) A computer readable medium bearing programming instructions, which, when executed by a computer, cause the computer to perform a method of[[to]] determining[[e]] distribution of parts from inventory to customer locations, said method comprising:

prioritizing requests for a part from inventory by the customer locations based on an identification of the part, a priority need for the part, and inventory available to ship; prioritizing the customer locations that have a need for the part to create priorities for the customer locations; and

forming a shipment plan by iteratively:

assigning a defined minimum size allotment of the parts to the customer location having a current priority and then reprioritizing the priorities of all customer locations and assigning a defined minimum size allotment of the parts to a customer location having a new current priority, until one of all of the parts from inventory have been assigned and no customer location reports a need[[s]] of more of the parts assigned, wherein each current priority is determined from all customer locations for each iteration.

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- 18. (Previously presented) The computer readable medium of claim 17, wherein the method further comprises performing lot sizing optimization after the shipment plan is formed.
- 19. (Previously presented) The computer readable medium of claim 18, wherein the method further comprises splitting the shipping of the parts among multiple sources of the parts.
- 20. (Currently amended) A system for determining distribution of goods to customer locations, comprising:
- a processor that accesses requests for parts to be delivered to customer locations; and

means for forming a shipment plan of the goods to said customer locations, by iteratively assigning a defined minimum size allotment of the parts to a customer location having a current priority and then reprioritizing the priorities of all customer locations and assigning a defined minimum size allotment of the parts to a customer location having a new current priority, until one of all of the parts from inventory have been assigned and no customer location reports a need[[s]] of more of the parts assigned, wherein each current priority is determined from all customer locations for each iteration.